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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,813	02/28/2002	Steven James Wojcik	KCX-450 (16960)	2378

7590 01/03/2008

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EXAMINER	
HAUGLAND, SCOTT J	

ART UNIT	PAPER NUMBER
3654	

MAIL DATE	DELIVERY MODE
01/03/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/085,813	WOJCIK ET AL.	
	Examiner	Art Unit	
	Scott Haugland	3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *71-106 and 108-116* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *71-106 and 108-116* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 71-74, 77, 83, 88, 90, 115, and 116 are rejected under 35 U.S.C. 103(a) as being unpatentable over Little (U.S. Pat. No. 1,648,990) in view of Kammann (U.S. Pat. No. 5,437,417).

Little discloses a winder for web comprising a web transport apparatus including a conveyor belt 12 and a plurality of winding modules (13, etc.) positioned along the web transport apparatus. Each winding module comprises a mandrel 19 and a positioning apparatus (18, 21, etc.) in operative association with the mandrel configured to move the mandrel into and out of engagement with the conveyor belt.

Little does not disclose that the mandrel is in operative association with a driving device for center driving the mandrel or that each mandrel extends across the web transport apparatus from a first side to a second side.

Kammann teaches providing a web winder with a driving device in operative association with a mandrel of a winding module for center driving and rotating the mandrel.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Little with a driving device for center driving the mandrel as taught by Kammann to provide greater control over the winding process to permit improved winding of different webs. It would have been obvious to provide Little with only two modules (one set) and reduce the width of the web transport apparatus so that the mandrels extend across the web transport apparatus from a first side to a second side to reduce the cost of the apparatus for uses in which it is not required to wind two webs simultaneously.

With regard to claim 73, the drive taught by Kammann would inherently brake the belt and mandrels at times during operation.

Claims 75, 84, 91, 92, 94-99, 101, 103, 105, 106, and 109-114 are rejected under 35 U.S.C. 103(a) as being unpatentable over Little in view of Kammann as applied to claim 71 above, and further in view of Nistri et al (U.S. Pat. No. 4,583,698).

Little does not disclose a vacuum conveyor as recited in claim 75. Little does not disclose that the winding modules are positioned at the end of a tissue machine (claim 84). Little does not disclose unwinding web from a parent roll of tissue (claim 91) or placing a core on the mandrel (claim 92).

Nistri et al teaches using a vacuum conveyor 9 and vacuum roll 8 to feed and facilitate threading of a web in a winder (claim 75). Nistri et al teaches winding tissue web unwound from a parent roll (claim 91) and placing a core on a winding mandrel (claim 92).

With regard to claim 75, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Little with a vacuum conveyor for feeding the web to the winding modules as taught by Nistri et al to maintain feeding engagement with the web and to facilitate threading through the winding apparatus.

With regard to claim 84, it would have been obvious to position the winding modules at the end of a tissue machine to for tissue rolls.

With regard to claim 91, it would have been obvious to supply tissue from a parent roll to the winding mandrels as taught by Nistri to form smaller tissue rolls.

With regard to claim 92, it would have been obvious to provide a core on the mandrels as taught by Nistri et al to facilitate attachment of web and removal of the wound product.

With regard to claim 109, it would have been obvious to accelerate the mandrel prior to forming the nip to prevent damage to the web and belt.

Claim 76 is rejected under 35 U.S.C. 103(a) as being unpatentable over Little in view of Kammann as applied to claim 71 above, and further in view of Menz et al (doc. no. WO 98/52857).

Little does not disclose a web transport apparatus that is an electrostatic belt.

Menz et al teaches using an electrostatic belt (in lieu of rollers 3, 4) to feed web material (page 6, third full paragraph; col. 3, lines 24-29 of corresponding US Pat. No. 6,264,132).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Little with a web transport apparatus in the form of an electrostatic belt as taught by Menz et al to provide more positive gripping and feeding of the web.

Claim 78 is rejected under 35 U.S.C. 103(a) as being unpatentable over Little in view of Kammann as applied to claim 71 above, and further in view of Diltz (U.S. Patent No. 3,869,095).

Little does not disclose a vacuum supplied mandrel.

Diltz teaches providing a winding apparatus with vacuum supplied mandrels 40, 41 for attaching a leading end of web to be wound to the cores.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Little with vacuum supplied mandrels as taught by Diltz to attach web to the cores without the need for adhesive.

Claim 79 is rejected under 35 U.S.C. 103(a) as being unpatentable over Little in view of Kammann as applied to claim 71 above, and further in view of Pretto et al (U.S. Patent No. 5,379,964).

Little does not disclose that the mandrels are made of a carbon fiber composite.

Pretto et al teaches forming a web winding mandrel of a carbon fiber composite to provide a lightweight mandrel having high strength and stiffness.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the mandrels of Little of a carbon fiber composite as taught by Pretto et al to make them light weight with high strength and stiffness.

Claim 80 is rejected under 35 U.S.C. 103(a) as being unpatentable over Little in view of Kammann as applied to claim 71 above, and further in view of Dowd (U.S. Patent No. 4,133,495).

Little does not disclose a tail sealing apparatus.

Dowd teaches providing a web winding apparatus with a tail sealing apparatus to prevent unwinding of an outer end of a web from a finished roll.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Little with a tail sealing apparatus as taught by Dowd to prevent unwinding of an outer end of the web from a completed product roll.

Claim 81 is rejected under 35 U.S.C. 103(a) as being unpatentable over Little in view of Kammann as applied to claim 71 above, and further in view of Urban (U.S. Patent No. 4,988,052).

Little does not disclose applying adhesive to the web prior to engagement with one of the winding modules.

Urban teaches applying adhesive to the leading end and trailing end of web 7 being wound before it engages winding modules 4, 5, 6.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply adhesive to the web in Little prior to engagement with one of the winding modules as taught by Urban to facilitate attachment of the web to the modules and initiation of winding.

Claims 82, 85, 86, 88, and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Little in view of Kammann as applied to claim 71 above, and further in view of Dusenbery (U.S. Pat. No. 4,208,019).

Little does not disclose a core loading or product stripping apparatus.

Dusenbery teaches providing a winding apparatus with a core loading and product stripping apparatus.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Little with a core loading and product stripping apparatus as taught by Dusenbery to reduce manual labor required to operate the apparatus.

With regard to claims 88 and 89, the winding modules are inherently slidable to the side opposite the loading and stripping side of the web transport apparatus by disassembly.

Claim 87 is rejected under 35 U.S.C. 103(a) as being unpatentable over Little (U.S. Pat. No. 1,648,990) in view of Kammann (U.S. Pat. No. 5,437,417) as applied to claim 71 above, and further in view of Billingsley (U.S. Pat. No. 3,157,371).

Note that Little discloses three winding modules.

Little does not disclose that all of the mandrels extend from the first to the second side of the web transport apparatus.

Billingsley teaches forming mandrels 17, 18 so that they extend from a first to a second side of a web transport apparatus that supplies slit web to the mandrels.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the webs in Little by slitting and to make the mandrels in Little extend from the first to the second side of the web transport apparatus as taught by Billingsley to permit simultaneous winding of webs of various different widths.

Claims 93, 104, and 108 are rejected under 35 U.S.C. 103(a) as being unpatentable over Little (U.S. Pat. No. 1,648,990) in view of Kammann (U.S. Pat. No. 5,437,417) and Nistri et al (U.S. Pat. No. 4,583,698) as applied to claim 91 above, and further in view of Billingsley (U.S. Pat. No. 3,157,371).

Note that Little discloses three winding modules.

Little does not disclose that all of the mandrels extend from the first to the second side of the web transport apparatus.

Billingsley teaches forming mandrels 17, 18 so that they extend from a first to a second side of a web transport apparatus that supplies slit web to the mandrels.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the webs in Little by slitting and to make the mandrels in Little extend from the first to the second side of the web transport apparatus as taught by Billingsley to permit simultaneous winding of webs of various different widths.

Claim 100 is rejected under 35 U.S.C. 103(a) as being unpatentable over Little in view of Kammann and Nistri et al as applied to claim 91, and further in view of Dowd (U.S. Patent No. 4,133,495).

Little does not disclose sealing a trailing edge of the web to the rolled product.

Dowd teaches cutting web after forming a full roll and sealing a trailing end of the web to the finished roll.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to seal the trailing end of the web to the roll in Little as taught by Dowd to prevent unwinding of the roll during subsequent handling.

Claim 102 is rejected under 35 U.S.C. 103(a) as being unpatentable over Little in view of Kammann and Nistri et al as applied to claim 91 above, and further in view of Menz et al (doc. no. WO 98/52857).

Little does not disclose a web transport apparatus that is an electrostatic belt.

Menz et al teaches using an electrostatic belt (in lieu of rollers 3, 4) to feed web material (page 6, third full paragraph; col. 3, lines 24-29 of corresponding US Pat. No. 6,264,132).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Little with a web transport apparatus in the form of an electrostatic belt as taught by Menz et al to provide more positive gripping and feeding of the web.

Response to Arguments

Applicants' arguments filed 10/9/07 have been fully considered but they are not persuasive.

Applicants argue that the last Office action does not explain how the combination of Little and Kammann provides greater control over the winding process. Applicant is directed to Kammann for a discussion of the advantages of center driving a winding mandrel and of providing both center driving and surface driving capabilities.

Applicants argue that both Little and Kammann teach away from their combination since Little teaches hook-like formations for permitting the roll to move slightly as the thickness of the material increases, while the driving device in Kammann would not permit this movement. However, Kammann provides for movement of the roll to accommodate the increase in the diameter of the roll as material is wound.

Applicants argue that Kammann does not disclose moving a mandrel into contact with a conveyor belt so as to form a nip in order to initiate winding of a web on the mandrel. However, Kammann discloses moving a mandrel into contact with a drive roll which is functionally equivalent to the conveyor belt in Little.

Applicants argue that the two winding modes in Kammann are completely independent of one another and does not disclose a combination of center and surface winding which would result if Kammann and Little were combined. However, Kammann clearly discloses operation of center (central gap) and surface (central contact) winding together and center winding alone. Little discloses surface winding alone. The combined device would be capable of operating in different modes depending on the

particular winding operation to be performed as taught by Kammann. The apparatus of claim 71 does not distinguish over the combination.

Applicants argue that Little does not disclose or suggest accelerating a mandrel to a desired rotation speed prior to placing the mandrel adjacent to a conveyor belt. However, acceleration of the mandrels in Little is inherent in operation of the disclosed apparatus. Little discloses positioning a rotating mandrel adjacent to the conveyor belt for forming a nip for initiating formation of a wound roll. Claim 91 does not require driving the mandrel before contact with the conveyor belt, but it would have been obvious from Kammann to provide a center drive and use it in this way to prevent damage to the belt, mandrel, and web being wound. It is noted that Nistri, in addition to Little, discloses placing a mandrel 11 adjacent to a conveyor belt 9 to form a nip. The drive roll 2 in Kammann is functionally equivalent to a conveyor belt.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Haugland whose telephone number is (571) 272-6945. The examiner can normally be reached on Mon. - Fri., 10:00 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on (571) 272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

sjh
12/28/07

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